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Water Supply Outlook For Nevada



SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

NEVADA DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

AS OF
MAR. 1, 1979

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: VIEW OF A SNOWTEL DATA SITE IN THE SNOWY RANGE IN WYOMING. TALL CYLINDRICAL DEVICE IS A PRECIPITATION GAGE. SNOW PILLOWS ON THE GROUND NOT VISIBLE DUE TO SNOW COVER. SHELTER HOUSE, ANTENNA TOWER, ANTENNA, AND TEMPERATURE UNIT ARE VISIBLE BEHIND THE PRECIPITATION GAGE.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK FOR NEVADA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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ALL AVERAGES ARE FOR 1963-77 PERIOD

WATER SUPPLY OUTLOOK FOR NEVADA

SNOW WATER INCREASES DURING FEBRUARY WERE CONSIDERABLY ABOVE AVERAGE. THIS MONTH'S ACCUMULATIONS RANGE FROM 120 PERCENT ON THE HUMBOLDT TO 215 PERCENT IN THE TAHOE BASIN. THESE LARGE INCREASES GREATLY IMPROVED THE SNOWPACK BUT THE TAHOE-TRUCKEE BASIN REMAINS 10 PERCENT BELOW THE MARCH 1 AVERAGE.

STREAMFLOWS THIS SEASON ARE FORECAST BELOW AVERAGE ON THE SIERRA STREAMS AND THE HUMBOLDT RIVER AT PALISADE. MOST OTHER STREAMS ARE FORECAST FOR AVERAGE OR SLIGHTLY ABOVE AVERAGE FLOWS.

USABLE STORAGE IN LAKE TAHOE IS 113,000 ACRE-FEET FOR ONLY 23 PERCENT OF AVERAGE. LAST YEAR ON MARCH 1 THERE WAS 69,000 ACRE-FEET. RYE PATCH CONTAINS 59,000 ACRE-FEET OR 49 PERCENT OF AVERAGE. BRIDGEPORT RESERVOIR IS FULL. OTHER RESERVOIRS HAVE AVERAGE TO ABOVE AVERAGE STORAGE.

Sierra East Slope

As of March 1, this summer's streamflows are forecast below average on all streams. Lake Tahoe rise is forecast at 1.15 feet rise or 81 percent of average. The Truckee River at Farad is forecast at 200,000 acre-feet or 73 percent. The Carson and Walker streamflows range from 90 to 99 percent.

Snow course measurements indicated very large increases from the storms during February. February increases ranged from 170 percent on the Walker to 215 percent on the Tahoe Basin. These large storms increased the snowpack considerably but the Truckee-Tahoe Basin is still below average with 90 to 92 percent respectively. Snowpack in the Carson and Walker basins is slightly above average at 107 percent.

Ward Creek #2 snow course had the most significant increase during the month with accumulation of 16.4 inches of water.

Lake Lucille in the Tahoe basin had the most snow with a snow depth of 137 inches containing 36.9 inches of water. The April 1 snow water average at this course is 55.9 inches indicating the need for a large amount of wet snow during March to bring up to average. Reservoir storage has improved but usable storage in Lake Tahoe and Stampede is far below average. Topaz contains 50 acre-feet for 114 percent of average. Bridgeport Reservoir is full. Lahontan contains 225,000 acre-feet for 97 percent of average. Last year Lahontan had 114,000 acre-feet in storage.

Humboldt

Streamflows in the Humboldt Basin are forecast below average at the Palisade and Comus stations. The North Fork, South Fork, Marys River, Lamoille Creek and Martin Creek forecasts range from 100 percent to 110 percent.

Reservoir storage in Rye Patch is 59,000 acre-feet. This compares to 49,000 acre-feet last year and a 121,000 acre-feet average.

Owyhee and Snake River

Streams in this basin are forecast to flow above average this season. Snow course measurements indicate a snow water content of 144 percent of average.

Wildhorse Reservoir contains 29,000 acre-feet or 97 percent of average. Last year's March 1 storage was 23,000 acre-feet.

Eastern Nevada

All snow courses in eastern and central Nevada are considerably above average, ranging from 107 percent to 270 percent. Water supplies in these areas should be very favorable for this summer. Small streams should have flows above average during the rest of the season.

Southern Nevada

Snow measurements in this area are significantly above average. In the Mt. Charleston area snow water content is 195 percent of average while in the Caliente area snow water is nearly seven times average.

The Virgin River streamflow at Littlefield, Arizona is forecast at 240 percent.

Northern Great Basin

Many snow course measurements in this area indicate below average snow water. Streamflows are forecast below average.

PROSPECTIVE WATER SUPPLY FOR NEVADA

20 19 18 17 16 15 14 13

O R E G O N I D A L A H O O Q

**STREAMFLOW FORECASTS
FOR
APRIL 1 – JULY 31**

March 1, 1979

LEGEND

- SNOW DATA MEASURING SITE
- 115% FORECAST IN PERCENT OF AVERAGE
- ELEVATION IN FEET

5,000 and Under
5,000 to 7,500
7,500 and Over

STREAMFLOW FORECASTS
FOR
APRIL 1 - JULY 31

March 1, 1979

LEGEND

SNOW DATA MEASURING SITE
115% FORECAST IN PERCENT OF AVERAGE

ELEVATION IN FEET

5,000 and Under

1000

1,000 to 7,500

7,500 and Over

* PERCENT SNOW PACK

4

Source: Base map prepared by SCS, WTSC Carto Unit from USGS 1:1,000,000 Nat. Atlas. Thematic detail prepared by state staff



10 0 10 20 30 40 50 60 MILES
SCALE 1:3,550,000

R

INDEX TO NEVADA SNOW COURSES

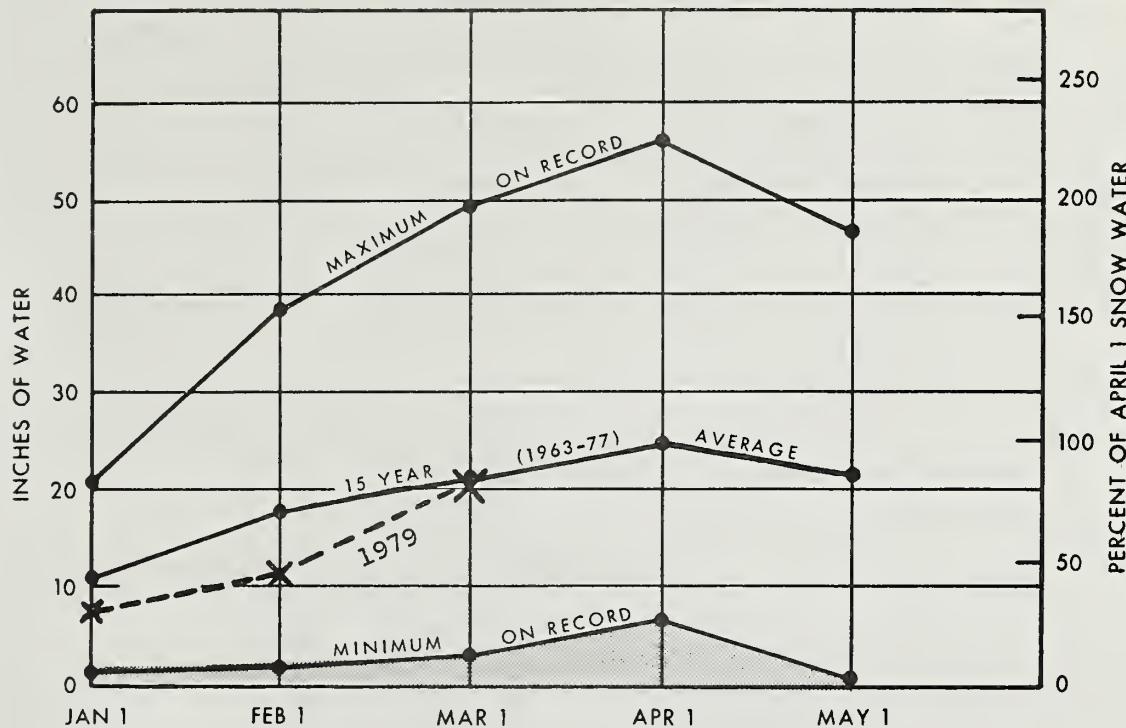
(By Basins)

Refer to the map on the preceding page for Snow Course locations.

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.	NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.
SNAKE RIVER BASIN											
SNAKE RIVER											
1SH15MA	Bear Creek	31	46N	58E	7800	20L6S	Echo Peak (CA)	35	12N	17E	7800
15H2	Fox Creek	33	46N	58E	6800	20L5	Echo Summit (CA)	6	11N	18E	7450
15H13SA	Goat Creek	31	46N	60E	8800	20L10S	Fallen Leaf (CA)	36	13N	17E	6300
1SH1SA	Hummingbird Springs	6	45N	60E	8945	19L2	Freel Bench (CA)	36	12N	18E	7300
15H20a	Merritt Mountain	10	46N	54E	7000	19K6	Glenbrook #2	13	14N	18E	6900
15H14SA	Pole Creek Ranger Station	13	46N	59E	8330	19L3MS	Haagans Meadow (CA)	36	12N	18E	8000
1SH18a	Red Point	15	47N	61E	7940	19L24S	Heavenly Valley (CA)	1	12N	18E	8850
1SH3SA	76 Creek	6	44N	58E	7100	20L4	Lake Lucille (CA)	28	12N	17E	8200
1SH19a	Stag Mountain	32	41N	58E	7800	19K4MS	Marlette Lake	18	15N	19E	8000
OWYHEE RIVER											
1SH45M	Big Bend	30	45N	56E	6700	20L3	Richardsons #2 (CA)	6	12N	18E	6500
16H6a	Columbia Basin	31	44N	53E	6650	20L1	Rubicon #1 (CA)	6	13N	17E	8100
16H8a	Fawn Creek	2	45N	52E	7000	20L2	Rubicon #2 (CA)	6	13N	17E	7500
1SH5	Gold Creek	32	45N	56E	6600	20K16	Tahoe City (CA)	.6	15N	17E	6250
16H1M	Jack Creek, Lower	18	42N	53E	6800	20K26	Tahoe City Alt. (CA)	7	15N	17E	6300
16H2SAM	Jack Creek, Upper	9	42N	53E	7250	20K27S	Tahoe City Cross (CA)	1	15N	16E	6750
16H4S	Jacks Peak	21	42N	53E	8420	19L1	Upper Truckee (CA)	21	12N	18E	6400
16H5S	Laurel Draw	20	45N	53E	6700	20K25	Ward Creek (CA) #3	21	15N	16E	6750
17G4a	Louise Canyon (OR)	27	40S	44E	6440	20K17	Ward Creek #2 (CA)	21	15N	16E	7000
1SH9MP	Taylor Canyon	35	39N	53E	6200						
INTERIOR											
UPPER HUMBOLDT RIVER											
15J17a	American Beauty	32	31N	58E	7800	20K14	Boca #2 (CA)	28	18N	17E	\$900
15J12SA	Corral Canyon	27	28N	57E	8500	20K22	Brockway Summit (CA)	3	17N	16E	7100
15J15M	Dorsey Basin	28	35N	60E	8100	20K21	Donner Park #2 (CA)	18	17N	16E	6000
15J3	Ory Creek	5	34N	60E	6500	20K10	Donner Summit (CA)	25	17N	14E	6900
1SH7	Fry Canyon	31	43N	54E	6700	20K7*	Fordyce Lake (CA)	34	18N	13E	6500
15J9SM	Green Mountain	23	29N	57E	8000	20K8*	Furnace Flat (CA)	10	17N	13E	6700
15J10	Harrison Pass #1	9	28N	57E	6600	20K4MS	Independence Camp (CA)	34	19N	15E	7000
15J11	Harrison Pass #2	16	28N	57E	7400	20K3S	Independence Creek (CA)	14	19N	15E	6500
15J4	Lamoille #1	15	32N	58E	7100	20K5S	Independence Lake (CA)	9	18N	15E	8450
15J6S	Lamoille #3	24	32N	58E	7700	19K3	Little Valley	17	16N	19E	6300
15J8P	Lamoille #5	31	32N	59E	8700	19K2S	Mt. Rose	7	17N	19E	9000
15J20	Pole Canyon #2	6	34N	61E	7700	19K7	Mt. Rose Ski Area	30	17N	19E	9000
15J16a	Robinson Lake	23	33N	59E	9200	20K6	Sage Hen Creek (CA)	7	18N	16E	6500
15H6MP	Rodeo Flat	36	43N	53S	6800	20K19	Squaw Valley #2 (CA)	6	15N	16E	7500
15J2	Ryan Ranch	1	34N	59E	5800	20K13S	Truckee #2 (CA)	22	17N	16E	6400
15J19	Smith Creek	26	30N	57E	7600	20K2*	Webber Lake (CA)	29	19N	14E	7000
1SH8	Tremewan Ranch	9	39N	55E	5700	20K1*	Webber Peak (CA)	30	19N	14E	8000
1SH10P	Trout Creek, Lower	28	37N	61E	6900						
1SH11A	Trout Creek, Upper	4	36N	61E	8500						
LOWER HUMBOLDT RIVER											
17K1	Big Creek Campground	10	17N	43E	6600						
17K2	Big Creek Mine	23	17N	43E	7600						
17K3	Big Creek, Upper	26	17N	43E	7800						
17H2	Buckskin, Lower	25	45N	39E	6700						
17H1	Buckskin, Upper	11	45N	39E	8200						
17L1	Corral, Lower	12	11N	40E	7500						
17L2	Corral, Upper	20	11N	41E	8000						
17J2	Golconda #2	22	35N	39E	6000						
17H4	Granite Peak	22	44N	39E	7800						
17H5	Lamance Creek	13	42N	38E	6000						
17H3	Martin Creek	13	44N	39E	6700						
16H3AP	Midas	18	39N	46E	7200						
16H7a	Toe Jam	29	40N	50E	7700						
EASTERN NEVADA											
14L1	Baker #1	29	13N	69E	7950						
14L2	Baker #2	30	13N	69E	8950						
14L3	Baker #3	25	13N	68E	9250						
14K25	Berry Creek	26	17N	65E	9100						
14K1	Bird Creek	34	19N	65E	7500						
14K9a	Defiance Mines	9	14N	63E	9200						
15J15S	Hole-in-Mountain	6	35N	61E	7900						
14K8	Kalamazoo Creek	34	20N	65E	7400						
14K3	Murray Summit	25	16N	62E	7250						
15K1	Robinson Summit	34	18N	61E	7600						
14K7	Silver Creek #2	30	16N	69E	8000						
14K5	Ward Mountain #2	25	15N	62E	8900						
CENTRAL GREAT BASIN											
18M2	Campsite Mountain (CA)	19	55	35E	10200						
18M5a	Chiavovich Flat (CA)	32	25	34E	10500						
15N2	Clark Canyon	8	195	56E	9000						
18M1	Montgomery Pass	4	1N	33E	7100						
18M3a	Pinchot Creek (CA)	28	1N	33E	9300						
18M4a	Piute Pass (CA)	33	45	33E	11700						
15N1	Trough Springs	23	185	55E	8500						
NORTHERN GREAT BASIN											
19H1a	Bald Mountain	17	45N	21E	6270						
20H6	Barber Creek (CA)	23	39N	16E	6500						
18G6a	Cedar Pass (CA)	12	43N	14E	7100						
18H1	Denio Creek (OR)	14	415	34E	6000						
18H1	Disaster Peak	8	47N	34E	6500						
20H3a	Oisinal Swamp (CA)	31	48N	17E	7000						
20H7	Eagle Peak (CA)	35	40N	15E	7200						
19H3	Gar Mountain	7	42N	19E	6000						
19H2	Hays Canyon	1	39N	18E	6400						
19H4a	Little Bally Mountain	8	45N	19E	6000						
20H9	Mt. Bidwell (CA)	6	47N	16E	7200						
20H10	North Star (CA)	13	47N	16E	6200						
17G5a	Oregon Canyon (OR)	9	40S	40E	7240						
17H6a	Quinn Ridge	9	47N	41E	6300						
20H4	Reservation Creek (CA)	12	46N	15E	5900						
18G5a	Trout Creek (OR)	10	415	38E	7800						
LAKE TAHOE											
20L6S	Echo Peak (CA)	35	12N	17E	7800						
20L5	Echo Summit (CA)	6	11N	18E	7450						
20L10S	Fallen Leaf (CA)	36	13N	17E	6300						
19L2	Freel Bench (CA)	36	12N	18E	7300						
19K6	Glenbrook #2	13	14N	18E	6900						
19L3MS	Haagans Meadow (CA)	36	12N	18E	8000						
19L24S	Heavenly Valley (CA)	1	12N	18E	8850						
20L4	Lake Lucille (CA)	28	12N	17E	8200						
19K4MS	Marlette Lake	18	15N	19E	8000						
20L3	Richardson's #2 (CA)	6	12N	18E	6500						
20L1	Rubicon #1 (CA)	6	13N	17E	8100						
20L2	Rubicon #2 (CA)	6	13N	17E	7500						
20K16	Tahoe City (CA)	.6	15N	17E	6250						
20K26	Tahoe City Alt. (CA)	7	15N	17E	6300						
20K27S	Tahoe City Cross (CA)	1	15N	16E	6750						
19L1	Upper Truckee (CA)	21	12N	18E	6400						
20K25	Ward Creek (CA) #3	21	15N	16E	6750						
20K17	Ward Creek (CA) #2	21	15N	16E	7000						
TRUCKEE RIVER											
20K14	Boca #2 (CA)	28	18N	17E	\$900						
20K22	Brockway Summit (CA)	3	17N	16E	7100						
20K21	Donner Park #2 (CA)	18	17N	16E	6000						
20K10	Donner Summit (CA)	25	17N	14E	6900						
20K7*	Fordyce Lake (CA)	34	18N	13E	6500						
20K8*	Furnace Flat (CA)	10	17N	13E	6700						
20K4MS	Independence Camp (CA)	34	19N	15E	7000						
20K3S	Independence Creek (CA)	14	19N	15E	6500						
20K5S	Independence Lake (CA)	9	18N	15E	8450						
19K3	Little Valley	17	16N	19E	6300						
19K2S	Mt. Rose	7	17N	19E	9000						
19K7	Mt. Rose Ski Area	30	17N	19E	9000						
20K6	Sage Hen Creek (CA)	7	18N	16E	6500						
20K19	Squaw Valley #2 (CA)	6	15N	16E	7500						
19L13S	Squaw Valley Ridge (CA)	22	17N	16							

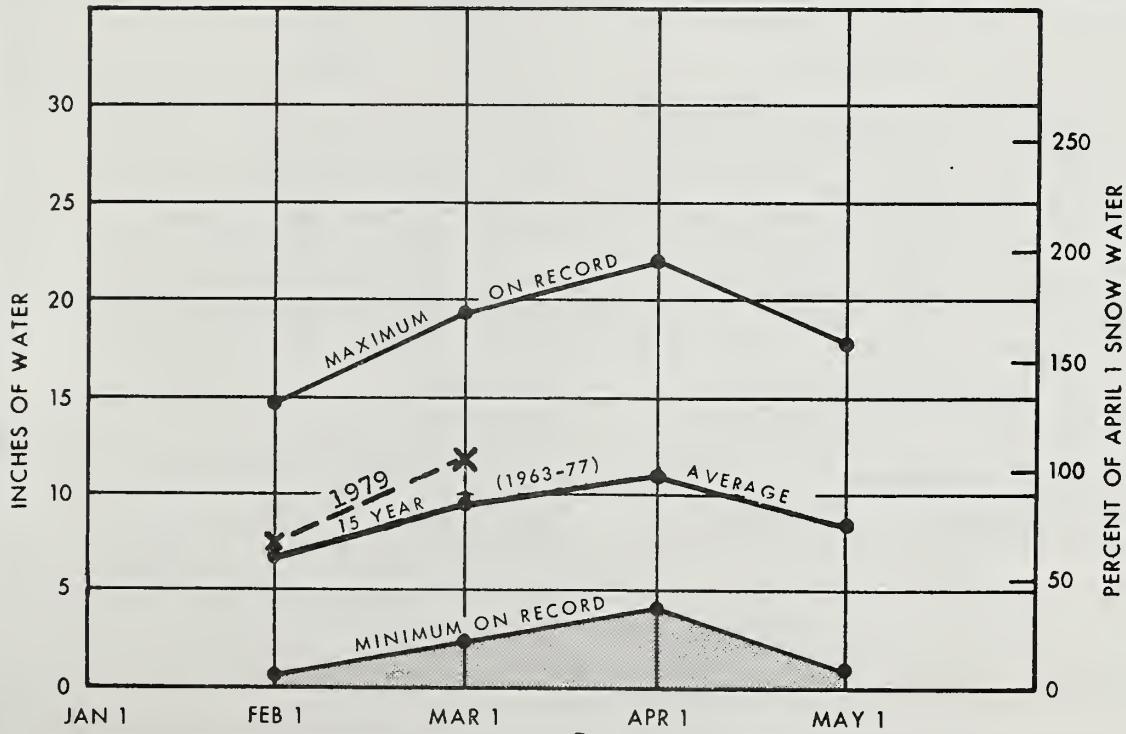
WINTER SNOWPACK
TAHOE, TRUCKEE, CARSON & WALKER BASINS
CALIFORNIA - NEVADA
1979

Data based on 9 long term Snow Courses



WINTER SNOWPACK
UPPER HUMBOLDT & SNAKE BASINS
NEVADA
1979

Data based on 13 selected Snow Courses



STREAMFLOW FORECASTS (Thousand Acre Feet) as of: March 1, 1979

Forecasts are based on snow-water presently stored in the mountain watersheds and the assumption that precipitation will be near average throughout the forecast period. Peak flow forecasts indicate the most probable range for the maximum average 24-hour flow. All averages are for 1963-77 period.

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average +
TRUCKEE RIVER				
Galena Creek near Steamboat, NV	April-July	3.6	82	4.4
Little Truckee River above Boca, CA	April-July	62	71	87
Truckee River at Farad, CA 1/ 2/	April-July	200	73	273
Lake Tahoe Rise in Feet (assuming gates closed) 1/	April-High	1.15	81	1.42
Sage Hen Creek, CA	April-July	5	77	6.5
Steamboat Creek at Steamboat, NV	April-July	4	77	5.2
CARSON RIVER				
East Carson near Gardnerville, NV	April-July	180	96	187
West Carson at Woodfords, CA	April-July	50	94	53
Carson River near Carson City, NV	April-July	166	91	183
Carson River near Fort Churchill, NV	April-July	150	90	167
WALKER RIVER				
East Walker near Bridgeport, CA 3/	April-Aug.	64	93	69
W. Walker below L. Walker nr Coleville, CA	April-July	145	99	146
SNAKE RIVER				
Owyhee River near Owyhee, NV 4/	April-July	90	112	80
Owyhee River near Gold Creek, NV 4/	April-July	30	130	23
S. Fork Owyhee Rv. nr White Rock, NV	April-July	130	146	82
Salmon Falls Creek nr San Jacinto, NV	March-Sept.	80	84	95
COLORADO RIVER				
Virgin River at Littlefield, AZ	April-June	115	240	48
Virgin River at Hurricane, UT	April-June	107	218	49
HUMBOLDT RIVER				
Lamoille Creek near Lamoille, NV	April-July	30	107	28
S. Fork Humboldt above Dixie Creek	April-July	80	110	73
Marys River above Hot Springs, NV	April-July	37	100	37
N. Fork Humboldt at Devils Gate, NV	April-July	37	106	35
Humboldt River at Palisade, NV	April-July	204	92	221
Humboldt River at Comus, NV	April-July	150	86	175
Kingston Creek near Austin, NV	April-July	4.5	136	3.3
L. Humboldt Rv. nr Paradise Va., NV	April-July	12	124	9.7
Martin Creek near Paradise, NV	April-July	15	100	15
Reese River near Ione, NV	April-July	7	117	6.6
Rock Creek nr Battle Mountain, NV	April-July	18	113	16
GREAT NORTHERN BASIN				
Bidwell Creek nr Fort Bidwell, CA	April-July	9.5	79	12
Mill Creek near Cedarville, CA	April-July	4	98	4.1
Deep Creek near Cedarville, CA	April-July	3.1	86	3.6
Eagle Creek near Eagleville, CA	April-July	4.1	95	4.3
Quinn River near McDermitt, NV	April-July	15	94	16
E. Fork Quinn Rv. nr McDermitt, NV	April-July	12	92	13
EASTERN NEVADA				
Franklin River near Arthur, NV	April-July	6	102	5.9
Steptoe Creek near Ely, NV	April-July	3	150	2

1. Forecast issued by Truckee Basin Water Committee

2. Observed flow plus change in storage in Boca, Stampede, Prosser Reservoir, Donner, Independence and Martis Creek Lakes and minus the flow at Truckee River at Tahoe City, CA.

3. Observed flow plus change in storage in Bridgeport Reservoir

4. Observed flow plus change in storage in Wildhorse Reservoir

RESERVOIR STORAGE (Thousand Acre Feet) AS OF March 1, 1979

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average +
Owyhee	Wild Horse	72	29	23	30
Lower Humboldt	Rye Patch	172	59	49	121
Colorado	Mohave	1,810	1,657	1,647	1,674
Colorado	Mead	26,159	23,297	21,169	17,520
Tahoe	Tahoe	732	113	69	489
Truckee	Boca	41	23	23	19
Truckee	Stampede**	220	61	32	120*
Truckee	Prosser***	30	10	0.1	8*
Carson	Lahontan	291	225	114	232
West Walker	Topaz	59	50	11	44
East Walker	Bridgeport	42	42	13	34

* Less than 15 years.

** Storage began August 1, 1969.

*** Flood Control use allocation of 20,000 acre-feet between November 1 and April 10.

TOTAL RESERVOIR STORAGE (Thousand Acre Feet)

MONTH	This Year	Last Year	Average +
October 1	472	97	786
January 1	422	124	844
February 1	495	221	920
March 1	541	302	968
April 1		448	1,135
May 1		533	1,033

The above data developed from Wild Horse, Rye Patch, Tahoe, Boca, Lahontan, Topaz, and Bridgeport Reservoirs in 1,000 Acre-feet.

TOTAL USABLE CAPACITY 1,409

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average +
East Fork Carson River near Gardnerville, NV	1650 - 1850	1865
Carson River near Carson City, NV	1725 - 1925	2098
Carson River near Fort Churchill, NV	1525 - 1725	1914
W. Walker R. below L. Walker nr Coleville, CA	1400 - 1600	1589

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
East Carson River near Gardnerville, NV	200	7/21	7/24

+ 1963-1977 period.

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year

LAKE TAHOE

Echo Peak (CA)	7800	2/26/79	94	29.8	45.4	-
Echo Summit (CA)	7450	2/27/79	86	25.1	33.9	28.3
Fallen Leaf (CA)	6300	2/27/79	29	8.2	10.6	-
Freel Bench (CA)	7300	2/26/79	42	12.3	14.9	10.2*
Glenbrook #2	6900	2/26/79	35	9.6	13.2	9.1*
Hagans Meadow (CA)	8000	2/26/79	59	15.0	24.4	13.8*
Heavenly Valley (CA)	8800	2/26/79	76	21.6	33.0	26.3*
Lake Lucille (CA)	8200	2/26/79	137	36.9	66.8	49.0*
Marlette Lake	8000	2/27/79	62	18.6	25.8	18.4
Richardsons #2 (CA)	6500	2/26/79	54	14.0	18.5	14.1
Rubicon #1 (CA)	8100	2/27/79	122	33.4	49.8	39.0
Rubicon #2 (CA)	7500	2/27/79	81	23.3	34.2	24.2
Tahoe City Cross (CA)	6750	2/28/79	57	16.3	23.0	-
Upper Truckee (CA)	6400	2/26/79	45	10.9	12.5	8.7*
Ward Creek #2 (CA)	7000	2/27/79	98	31.8	45.7	33.5
Ward Creek #3 (CA)	6750	2/26/79	98	29.8	41.9	32.9*

TRUCKEE RIVER

Boca #2 (CA)	5900	2/25/79	24	6.9	7.2	6.1
Brockway Summit (CA)	7100	2/28/79	58	16.0	24.7	17.0*
Castle Creek (CA)	7400	2/27/79	117	36.2	58.8	41.9
Donner Park #2 (CA)	6000	2/25/79	50	12.7	18.1	14.9
Donner Summit (CA)	6900	2/28/79	95	29.0	51.7	31.5
Fordyce Lake (CA)	6500	2/27/79	106	33.8	52.2	30.8
Furnace Flat (CA)	6700	2/27/79	114	36.9	59.3	36.2*
Independence Camp (CA)	7000	2/26/79	60	16.4	29.1	19.2*
Independence Creek (CA)	6500	2/27/79	36	8.7	18.8	11.1*
Independence Lake (CA)	8450	2/26/79	91	24.8	49.4	32.0
Little Valley	6300	2/26/79	32	8.4	11.1	8.2
Mount Rose	9000	2/27/79	77	25.3	41.4	-
Mount Rose Ski Area	8850	2/26/79	106	31.8	53.7	33.3*
Sage Hen Creek (CA)	6500	2/27/79	47	12.6	24.4	14.2*
Squaw Valley #2 (CA)	7500	2/26/79	123	36.1	58.0	40.4
Truckee #2 (CA)	6400	2/28/79	43	12.1	16.5	11.7*
Webber Lake (CA)	7000	NS				
Webber Peak (CA)	8000	NS				

CARSON RIVER

Blue Lakes (CA)	8000	2/27/79	103	30.7	55.9a	30.2*
Carson Pass, Upper (CA)	8600	2/27/79	94	30.8	40.1	29.0
Clear Creek	7300	2/26/79	37	10.2	14.6	11.3
Ebbetts Pass AM (CA)	8700	2/27/79	105	34.5a	38.8a	29.1
Ebbetts Pass #2 (CA)	8700	2/27/79	103	34.0	47.3	-
Fish Valley, Upper (CA)	8050	2/27/79	45	13.5a	16.8a	12.7
Poison Flat (CA)	7900	2/27/79	57	17.3	22.3	-
Wet Meadows Lake AM (CA)	8050	2/27/79	82	27.5a	30.0a	23.3*
Wet Meadows #2 (CA)	8050	2/27/79	111	37.3	45.3	-
Wolf Creek AM (CA)	8000	2/27/79	91	30.0	33.6a	27.4*
Poison Flat AM (CA)	7900	2/27/79	44	11.8a	19.0a	13.7a

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
<u>WALKER RIVER</u>						
Buckeye Roughs (CA)	7900	2/27/79	59	18.2	24.3	-
Center Mountain (CA)	9400	2/27/79	113	35.6	48.4	34.4*
Leavitt Lake (CA)	9400	2/27/79	111	38.6	-	-
Leavitt Meadow (CA)	7200	2/27/79	44	15.4	17.4	-
Lobdell Lake (CA)	9200	2/27/79	55	14.4	23.5	14.3*
Sawmill Ridge (CA)	8750	2/27/79	60	16.6	31.7	-
Sonora Pass (CA)	8800	2/27/79	77	24.1	33.4	21.0
Tioga Pass (CA)	9900	3/2/79	88	28.4	47.2	19.6*
Virginia Lakes (CA)	9500	2/27/79	49	16.0	27.1	14.3*
Virginia Lakes Ridge (CA)	9200	2/27/79	52	15.3	26.8	14.8*
Willow Flat (CA)	8250	2/27/79	37	11.6	15.9	-
<u>NORTHERN GREAT BASIN</u>						
Bald Mountain AM	6720	2/26/79	21	5.3a	4.6a	2.8
Barber Creek (CA)	6500	2/21/79	27	7.3	11.7	10.4
Cedar Pass (CA)	7100	2/20/79	44	11.6	12.1	12.9
Denio Creek AM (OR)	6000	3/2/79	7	2.0a	0.9a	0.6*
Disaster Peak	6500	2/27/79	45	13.5	15.9	11.6
Dismal Swamp AM (CA)	7000	2/26/79	58	14.5	22.2a	13.2*
Eagle Peak (CA)	7200	NS	-	-	-	-
49 Mountain	6000	2/23/79	14	3.3	7.1	3.5
Hays Canyon	6400	2/21/79	11	2.3	7.1	3.1
Little Bally Mountain AM	6000	2/26/79	20	5.2a	6.3a	2.6
Mount Bidwell	7240	2/22/79	62	18.6	23.3	15.3*
North Star	6200	2/22/79	49	13.6	16.0	13.8*
Oregon Canyon AM (OR)	7240	3/2/79	24	6.7a	5.0a	4.6*
Quinn Ridge AM	6300	3/2/79	11	3.1a	3.4a	1.6
Reservation Creek (CA)	5900	2/23/79	39	11.9	11.3	9.9
Trout Creek AM (OR)	7800	3/2/79	36	10.1a	13.3a	15.4*
<u>SNAKE RIVER</u>						
Bear Creek	7800	2/27/79	59	17.0	20.7	18.0
Fox Creek	6800	2/27/79	40	10.5	10.7	9.7
Goat Creek	8800	2/27/79	46	13.0	17.6	15.7
Hummingbird Springs	8945	2/27/79	59	16.7	22.8	19.5
Merritt Mountain AM	7000	2/27/79	34	8.5a	5.2a	6.4*
Pole Creek Ranger Station	8330	2/27/79	55	17.6	16.3	18.6
76 Creek	7100	2/27/79	48	13.8	13.4	10.5
Stag Mountain AM	7700	2/27/79	33	8.3a	6.4a	5.4
<u>OWYHEE RIVER</u>						
Big Bend	6700	2/27/79	38	9.4	9.5	7.5
Columbia Basin AM	6650	2/27/79	43	11.2a	13.4a	8.2*
Fawn Creek AM	7000	2/27/79	34	8.8a	7.5	5.3
Gold Creek	6600	2/27/79	30	7.7	5.8	4.9
Jack Creek, Lower	6800	2/27/79	26	7.7	4.3	-
Jack Creek, Upper	7250	2/27/79	35	9.9	7.9	6.7
Jacks Peak	8420	2/27/79	65	17.8	20.4	-
Laurel Draw	6700	2/27/79	35	8.6	8.1	6.9
Louse Canyon AM (OR)	6440	3/2/79	36	10.1a	8.4a	3.0a
Taylor Canyon	6200	2/27/79	28	8.3	6.7	4.5

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					Average +
<u>UPPER HUMBOLDT RIVER</u>						
American Beauty AM	7800	2/27/79	44	12.3a	10.9a	8.5a
Corral Canyon	8500	2/28/79	55	14.2	15.0	12.3
Dorsey Basin	8100	2/28/79	53	15.8	11.6	10.4*
Dry Creek	6500	2/28/79	33	7.7	6.2	2.8*
Fry Canyon	6700	2/27/79	31	8.2	7.1	5.9*
Green Mountain	8000	2/28/79	53	16.0	12.8	10.9*
Harrison Pass #1	6600	2/28/79	16	3.9	6.3	3.5*
Harrison Pass #2	7400	2/28/79	23	5.7	6.5	4.3*
Lamoille #1	7100	2/28/79	30	8.0	7.4	8.1
Lamoille #3	7700	2/28/79	41	11.1	11.6	10.4
Lamoille #5	8700	2/28/79	71	24.2	24.8	21.3
Pole Canyon #2	7700	2/28/79	64	19.9	13.2	-
Robinson Lake AM	9200	2/27/79	82	26.2a	29.7a	-
Rodeo Flat	6800	2/27/79	29	9.1	6.1	4.6*
Ryan Ranch	5800	2/28/79	11	3.6	-	0.8*
Smith Creek	7700	2/28/79	53	12.3	12.7	-
Tent Mountain AM	7000	2/27/79	39	9.8a	7.5a	11.7*
Tent Mountain AM	8350	2/27/79	60	18.0a	18.3a	19.3*
Tremewan Ranch	5700	NS	-	-	3.8	1.5
Trout Creek, Lower	6900	2/28/79	24	6.0	5.5	2.8*
Trout Creek, Upper	8500	2/28/79	60	17.4	17.5	15.4*
<u>LOWER HUMBOLDT RIVER</u>						
Big Creek Campground	6600	2/26/79	12	3.2	3.4	1.6
Big Creek Mine	7600	2/26/79	22	5.6	6.1	4.4
Big Creek Summit	8700	NS	-	-	12.3	-
Big Creek, Upper	7800	2/26/79	31	7.9	7.0	5.4*
Buckskin, Lower	6700	2/27/79	33	8.9	8.2	7.1
Buckskin, Upper	8200	2/27/79	39	12.8	10.2	8.4
Golconda #2	6000	2/25/79	21	4.7	5.5	4.5
Granite Peak	7800	2/27/79	46	13.0	19.9	13.1
Lamance Creek	6000	2/27/79	34	8.7	10.2	9.0
Martin Creek	6700	2/27/79	32	6.6	11.8	8.4
Midas	7200	2/27/79	23	5.7	10.4	2.2
Toe Jam AM	7700	NS	-	-	9.7	8.5*
<u>EASTERN NEVADA</u>						
Baker #1	7950	2/28/79	29	6.0	6.5	5.6*
Baker #2	8950	2/28/79	56	14.0	12.7	11.0*
Baker #3 AM	9250	2/27/79	62	15.5a	14.5a	11.9*
Berry Creek	9100	3/2/79	62	14.4	10.8	11.4*
Bird Creek	7500	3/2/79	22	4.9	3.2	3.4
Hole-in-Mountain	7900	2/28/79	63	25.3	16.3	18.6
Kalamazoo Creek	7400	2/27/79	36	9.3	8.0	6.0
Mount Defiance AM	9400	NS	-	-	15.0a	-
Murray Summit	7250	2/26/79	30	5.8	4.7	2.9
Robinson Summit	7600	2/27/79	20	4.2	3.8	2.0
Silver Creek #2 AM	8000	2/27/79	25	5.5a	8.0a	5.1
Ward Mountain #2 AM	7400	2/27/79	40	10.3a	10.3a	6.4*
White River #1	7400	NS	-	-	-	2.7

+ 1963-1977 period

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and or SNOW COURSE	THIS YEAR			PAST RECORD		
	NAME	Elevation	Date of Survey	Snow Depth (inches)	Water Content (inches)	Water Content
				Last Year	Average +	

CENTRAL GREAT BASIN

Clark Canyon	9000	3/1/79	45	12.5	15.7	5.2*
Montgomery Pass	7100	2/26/79	2	0.4	5.1	1.1*
Trough Springs	8500	NS	-	-	-	3.8*

LOWER COLORADO RIVER

Kyle Canyon	8200	2/27/79	53	17.6	20.8	8.9
Lee Canyon #2	9000	2/27/79	47	13.6	21.9	6.4*
Lee Canyon #3	8500	2/27/79	45	14.9	17.5	6.7
Mathew Canyon	6000	2/26/79	21	7.1	0.4	0.8*
Pine Canyon	6200	2/26/79	28	8.0	2.1	1.3*
Rainbow Canyon #2	8100	2/27/79	66	22.3	26.4	12.2*

DRI MEASUREMENTS IN TAHOE-TRUCKEE BASIN

Alder Creek	6960	3/3/79	82	26.8	36.1	-
Apollo Way	7300	3/2/79	42	10.4	19.7	-
Bennett Flat	6200	3/3/79	45	13.2	17.9	-
Davis Creek	5160	2/24/79	7	-	-	-
Evergreen Hills	5700	3/2/79	10	3.7	6.2	-
Galena Creek	7440	NS	-	-	30.6	-
Henness Pass Junction	6410	3/3/79	38	11.3	21.7	-
Hobart Mills	5850	3/3/79	28	8.8	10.2	-
Incline Lake	8000	2/2/79	74	25.6	32.4	-
Jones Creek	6000	3/2/79	11	3.9	8.3	-
Mt. Rose Resort	8280	3/2/79	82	25.0	41.2	-
North Star Fire Department	6320	3/3/79	26	19.4	10.8	-
RNR Test Site	6400	3/2/79	30	8.7	15.1	-
Sky Tavern	7620	3/2/79	51	15.2	26.4	-
Spooner Summit	7620	3/2/79	47	13.8	19.4	-
Squaw Valley Fire Department	6240	3/3/79	53	15.1	-	-
Sundance Lodge	7060	3/2/79	41	12.1	24.4	-
Tahoe Meadows	8540	3/2/79	107	35.0	48.9	-
Tamarack Lake	8820	3/2/79	86	27.8	-	-
Third and Incline Creeks	6235	3/2/79	17	4.4	-	-
Thunder Cliff	6200	3/3/79	45	13.6	17.4	-
Truckee Airport	5900	3/3/79	23	7.8	7.2	-
Whites Creek	5670	3/2/79	2	-	-	-

ADDITIONAL MEASUREMENTS

Marlette Lake	8000	2/12/79	50	14.0	-	-
Mount Rose Ski Area	8850	2/15/79	82	24.8	-	-

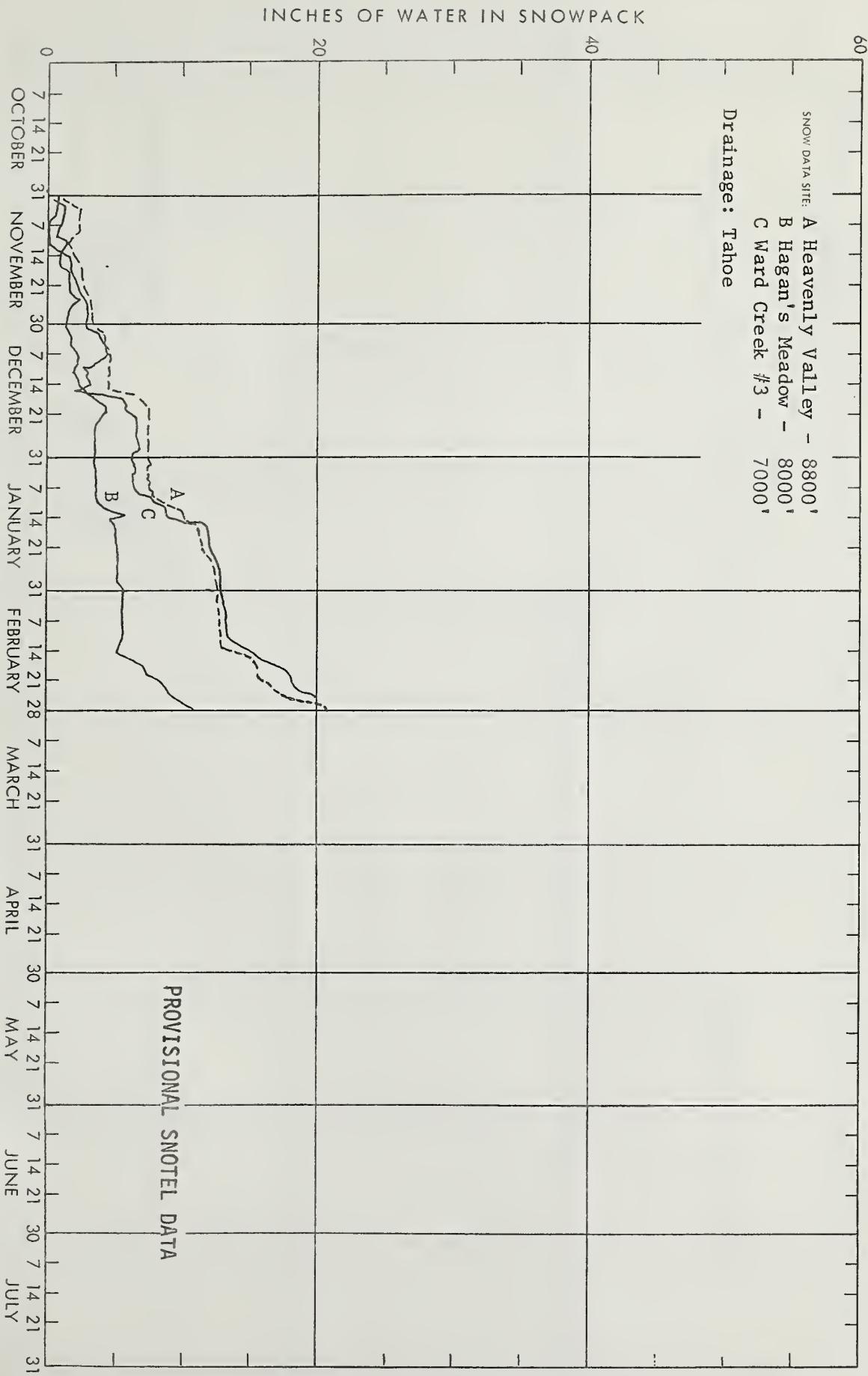
NOTE:

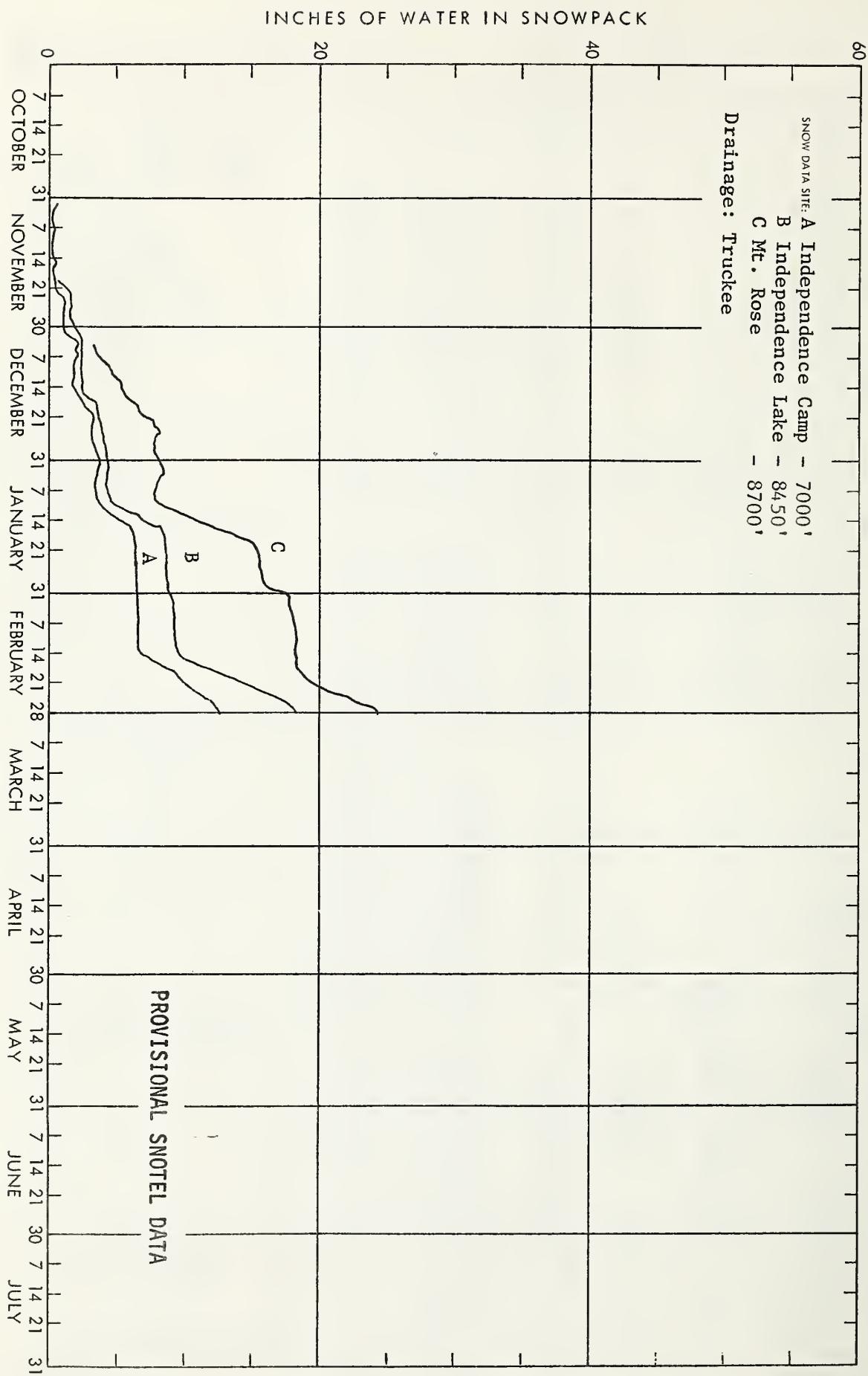
All averages based on 1963-77, 15 year period. Forecast period is April 1 through July 31 unless otherwise noted.
-Aerial marker; water content estimated. * 1963-77 adjusted average.

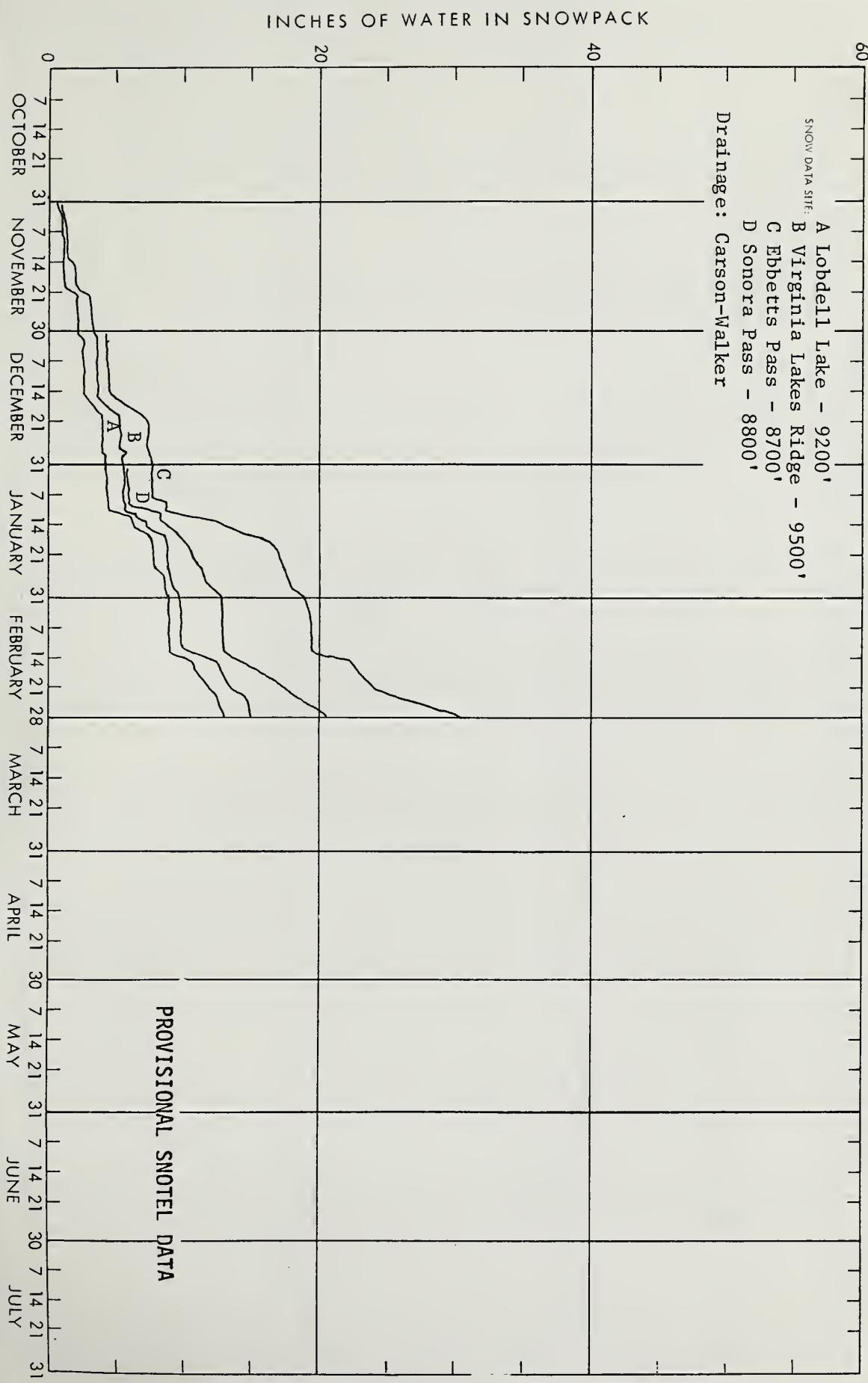
+ 1963-1977 period.

PRECIPITATION (Inches) March 1, 1979

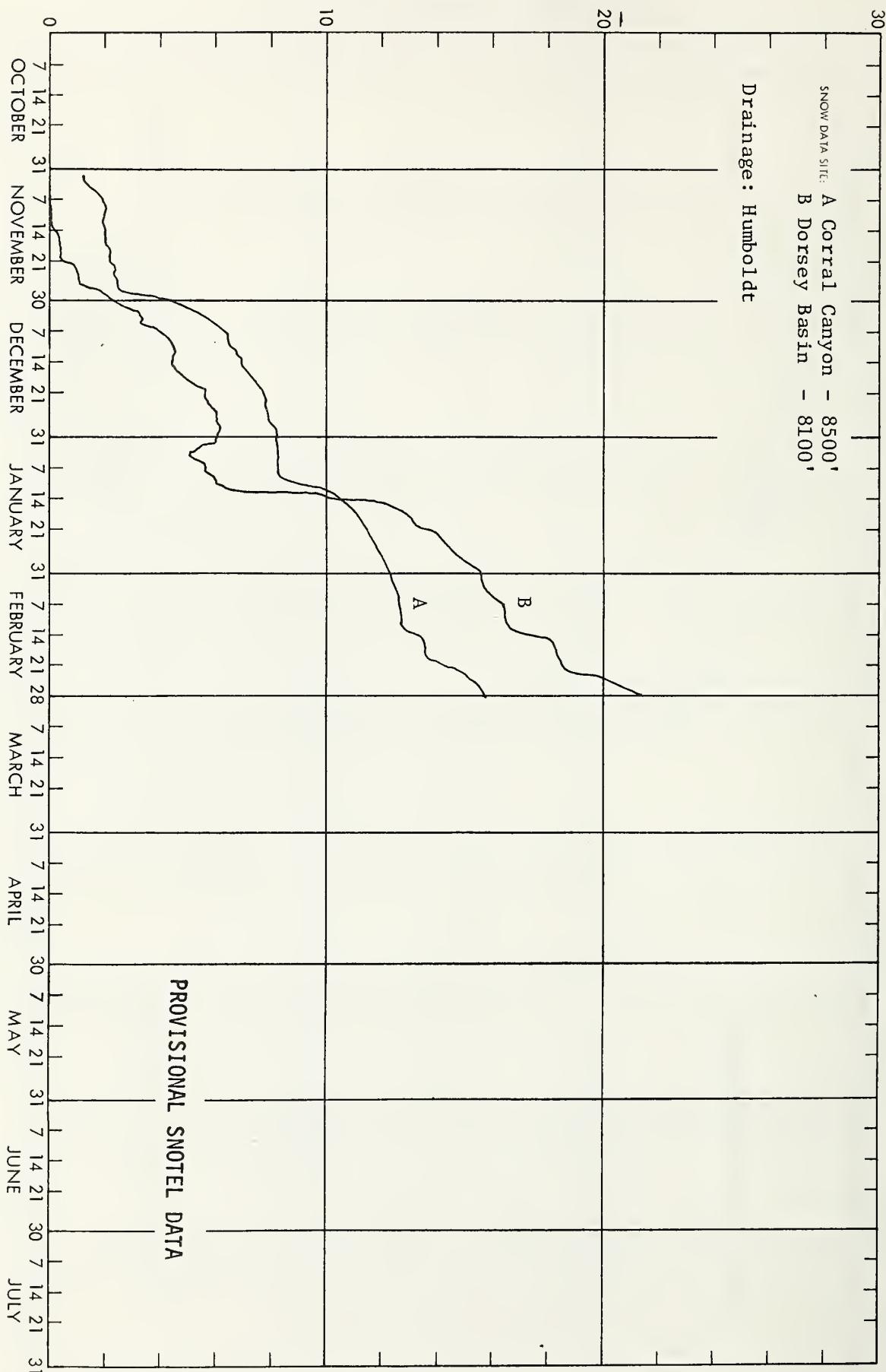
DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. OCT 1 TO DATE		
		Date of Reading	Month's Precipitation	Last Year	This Year	Last Year	1977
<u>LAKE TAHOE-TRUCKEE</u>							
Echo Peak	7800	2/26/79	3.8	6.0	22.0	35.7	12.1
Fallen Leaf	6300	2/27/79	5.7	4.0	18.0	25.0	6.8
Hagans Meadow	8000	2/26/79	7.2	5.6	21.0	26.6	7.9
Heavenly Valley	8800	2/26/79	6.9	5.9	18.8	-	-
Independence Camp	7000	2/26/79	6.7	6.4	21.0	29.4	7.1
Independence Creek	6500	2/26/79	6.2	6.7	15.9	29.5	9.9
Independence Lake	8450	2/26/79	7.4	-	16.7	-	12.7
Marlette Lake	8000	2/27/79	10.0	5.6	18.6	28.5	-
Mount Rose	9000	2/27/79	4.3	4.9	18.2	21.9	5.8
Mount Rose Ski Area	8850	2/26/79	13.8	-	32.3	34.0	-
Rubicon #2	7500	2/27/79	-	-	24.2	-	-
Tahoe City Cross	6750	2/28/79	8.8	4.7	27.1	23.7	8.8
Truckee #2	6400	2/28/79	7.8	5.9	17.6	14.5	6.0
Ward Creek #3	6750	2/26/79	14.8	9.0	37.6	47.0	16.3
<u>CARSON-WALKER RIVER</u>							
Blue Lakes	8000	2/28/79	-	-	29.7	-	-
Ebbetts Pass	8750	2/27/79	13.3	8.9	33.9	34.2	11.8
Poison Flat	7900	2/27/79	7.4	6.0	23.8	23.4	3.0
Wet Meadows	8050	2/27/79	12.3	8.2	25.1	24.8	8.7
Leavitt Meadows	7200	2/27/79	7.2	-	22.8	-	-
Lobdell Lake	9200	2/27/79	5.2	6.1	14.0	23.7	3.5
Sonora Pass	8800	2/27/79	8.4	8.3	23.8	28.9	11.5
Virginia Lakes Ridge	9200	2/27/79	6.5	7.9	18.3	27.4	15.7
<u>HUMBOLDT RIVER</u>							
Big Creek Summit	8700	NR	-	-	-	-	-
Buckskin, Lower	6700	2/27/79	-	-	10.8	-	-
Corral Canyon	8500	2/28/79	4.0	-	14.6	13.2	6.3
Dorsey Basin	8100	2/28/79	5.8	5.2	16.4	16.6	6.8
Granite Peak	7800	2/27/79	-	-	10.4	-	-
Green Mountain	8000	2/28/79	4.2	-	16.7	13.3	7.6
Lamance Creek	6000	2/27/79	-	-	12.7	19.0	-
Lamoille #3	7700	2/28/79	5.0	4.1	14.4	15.2	6.8
Midas	7200	NR	-	-	-	-	-
Rodeo Flat	6800	2/27/79	1.8	1.0	8.5	13.0	5.0
Trout Creek, Lower	6900	2/28/79	-	-	8.0	7.5	3.8
<u>SNAKE-OWYHEE RIVER</u>							
Bear Creek	7800	2/27/79	3.8	-	15.3	16.0	-
Big Bend	6700	2/27/79	2.4	1.5	9.0	9.6	8.7
Goat Creek	8800	2/27/79	4.0	5.8	17.3	19.0	10.1
Jacks Peak	8420	2/27/79	4.8	5.0	17.3	19.0	15.8
Laurel Draw	6700	2/27/79	3.6	3.8	13.2	-	-
Pole Creek RS	8330	2/27/79	4.0	-	12.3	13.0	-
76 Creek	7100	2/27/79	5.2	-	13.1	10.8	4.3
Taylor Canyon	6200	2/27/79	2.5	1.5	6.7	6.8	8.0
Upper Jack Creek	7250	2/27/79	3.5	4.3	13.7	13.5	13.5
<u>EASTERN NEVADA</u>							
Berry Creek	9100	3/2/79	-	7.0	13.1	11.2	-
Hole-in-Mountain	7900	2/28/79	-	-	16.2	-	-
<u>NORTHERN GREAT BASIN</u>							
Cedar Pass	7100	2/20/79	-	2.1	11.6	16.4	-
Disaster Peak	6500	2/27/79	-	-	12.6	14.7	-







INCHES OF WATER IN SNOWPACK

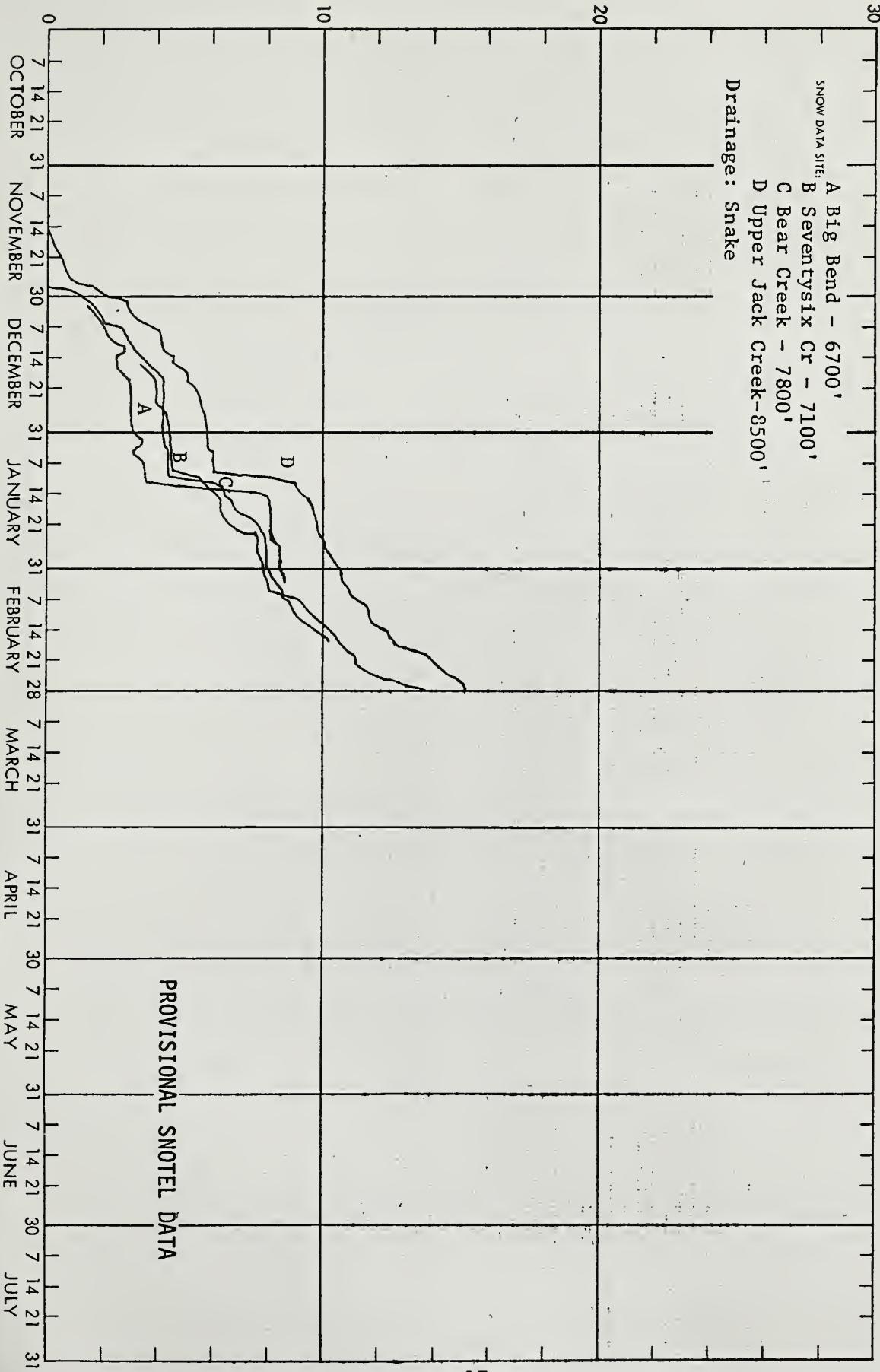


INCHES OF WATER IN SNOWPACK

SNOW DATA SITE: A Big Bend - 6700'
B Seven Tubs Cr - 7100'

C Bear Creek - 7800'
D Upper Jack Creek-3500'

Drainage: Snake



PROVISIONAL SNTEL DATA

Agencies Cooperating in Collecting Data Contained in this Bulletin

FEDERAL

Agricultural Research Service
Bureau of Reclamation
Fish and Wildlife Service
Forest Service
Geological Survey
Navy
Soil Conservation Service
U. S. District Court - Federal Water Master
NOAA, National Weather Service

STATE

California Cooperative Snow Surveys
California Department of Parks and Recreation
California Department of Water Resources
Colorado River Commission of Nevada
Idaho Cooperative Snow Surveys
Nevada Association of Conservation Districts
Nevada Department of Conservation & Natural Resources
Division of Water Resources
Nevada State Forester
Oregon Cooperative Snow Surveys
Utah Cooperative Snow Surveys
White Mountain Research Station, Univ. of California

PRIVATE

Amalgamated Sugar Company
Kennebott Copper Corporation
Nevada Irrigation District
Owyhee Project North Board of Control
Owyhee Project South Board of Control
Pacific Gas and Electric Company
Pershing County Water Conservation District
Sierra Pacific Power Company
Truckee-Carson Irrigation District
Walker River Irrigation District
Washoe County Water Conservancy District

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